QIIALCONN®

Comments to NPRM 03-137 3rd May 2004

Launchpad Applications

BREWapi

BREW Distribution System

gps0ne

CDMA Chipsets

Homeland Security Initiatives

Fleet Management Solutions

CDMA2000 1X

CDMA2000 1xEV-D0

CDMA2000 1xEV-DV

WCDMA/UMTS

Application Solutions

Mobile Processors

Base Station Processors

Radio Processors

CDMA University

Network Optimization

Software Tools

Development Tools

QCTest Tools

Client Software

Digital Cinema

Advanced Security Solutions

Australia • Austria • Belarus • Brazil • Canada • Chile • China • Colombia • Denmark • Dominican Republic • Ecuador • Guatemala • India • Indonesia • Israel • Italy • Japan • Mexico • Moldova • New Zealand • Nicaragua • Panama • Romania • Russia • South Korea • Sweden • Taiwan • Thailand • United Kingdom • United States • Venezuela • Vietnam

QUALCOMM CDMA Technologies

QUALCOMM Technology Licensing

QUALCOMM Wireless and Internet Group

QUALCOMM Strategic Initiatives



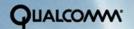
Verizon Wireless Going Nationwide With Flat-Rate EV-DO

- CDMA2000 1XEV-DO deployment to go beyond the current two markets -- San Diego and Washington, D.C.
- Offered at \$79.99 flat rate, all-ucan eat pricing, 1xEV-DO offers speeds of 300 to 500 kilobits per second, or about 10 times the average dial-up connection speed...

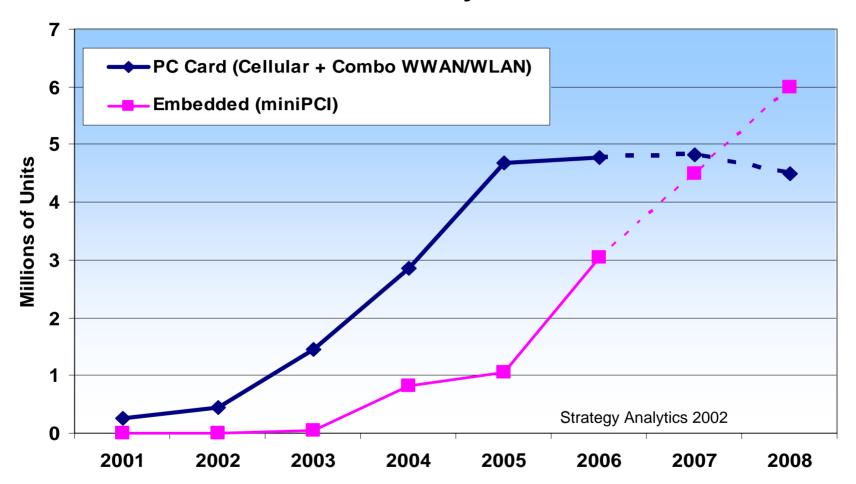


 Verizon says it will spend \$1 billion over the next two years to launch the EV-DO network... the company's nationwide deployment will be marketed to both consumers and enterprises...

Source: Verizon Wireless, January 2004



Cellular Connectivity in Notebooks



- PC card growth will peak in 2006 as embedded solutions overcome technical barriers, and as multi-mode solutions become viable
- PC cards will continue to offer legacy support for installed notebook base



QC NPRM 03-137 Comments

- The NPRM proposed changes apply only to Part 15 modular devices.
 QUALCOMM urges the FCC to adopt similar rules for Part 22 and Part 24 modular devices.
- Given the rapid proliferation of 3G technologies the laptop and PDA manufacturers wish to offer an integrated solution using modules based on technologies such as 1xRTT and/or 1xEV-DO
- By adopting rules to streamline the authorization process for Part 22 and Part 24 modular devices the FCC will enable the computing industry to bring WWAN products to market in a timely and cost effective manner
- The FCC should enact clear requirements for SAR testing of products with embedded authorized modules and antenna subsystems
- The FCC should exempt devices from SAR evaluations when the antennas are located in the laptop display a distance of 20 cm or greater from the users body



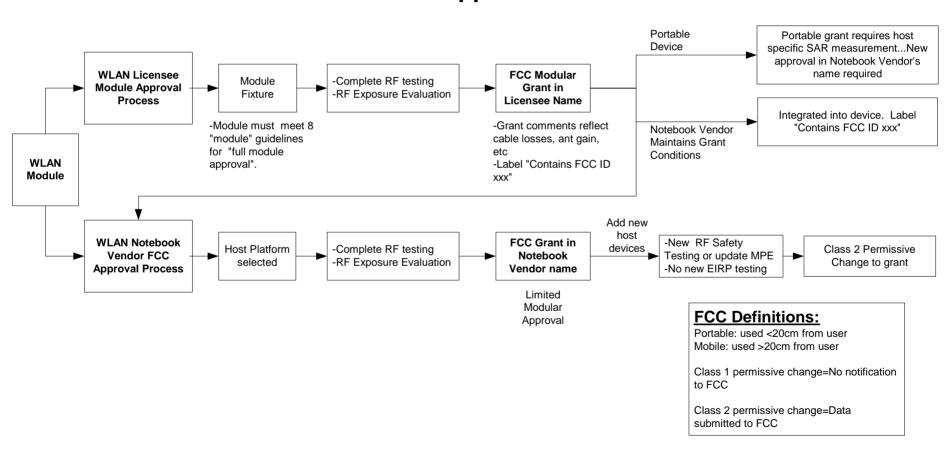
Formalize SAR Measurement Procedure for Laptops

- The OET Mobile and Portable RFx Procedure (March 18, 2004)
 released to TCBs and Interpretations database item 20040323-001
 - Defines measurement positions for laptops
 - Defines measurement requirements for laptops with antenna's located in the display portion of laptop where 20cm separation distance can be maintained, i.e. no SAR if 20cm separation distance maintained
 - Defines 3 host method for PC cards i.e. PCMCIA or PCIe
- Document is in-line with Qualcomm recommendations
- Part 2 Rules should reflect the requirements detailed in this document



FCC Approval Process For WLAN

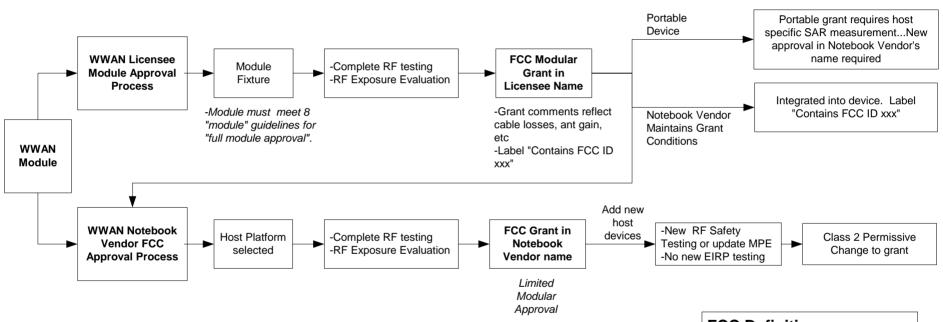
Part 15 Product Approval Process





FCC Approval Process For WWAN

FCC Part 22 and Part 24 Devices



Note: Modular and Limited Modular Approval process is not yet formalized within the FCC. See NPRM Docket 03-137

FCC Definitions:

Portable: used <20cm from user Mobile: used >20cm from user

Class 1 permissive change=No notification to FCC

Class 2 permissive change=Data submitted to FCC